## S.R.R. & C.V.R. Government Degree College (A)

An Autonomous & ISO 9001: 2015 Certified Institution:: Ranked by NIRF in 101-150 band at NIRF-2020 & 151-200 band in NIRF 2019 NAAC accredited Institution with grade B+ with C.G.P.A 2.6 during March, 2017

Machavaram, Vijayawada, Krishna District, AP-520 004

## SUJAY BIOTECH RESEARCH CENTER 9.1.2018



## DEPARTMENT OF BOTANY

SRR & CVR Government Degree College

An Autonomous & ISO 9001: 2015 Certified Institution:: Ranked by NIRF in 101-150 band at NIRF-2020 & 151-200 band in NIRF 2019 NAAC accredited Institution with grade B+ with C.G.P.A 2.6 during March. 2017

Machavaram, Vijayawada, Krishna District, AP-520 004



| Dates   | 9.1.2018  |
|---|---|
| Conducted through (DRC/JKC/ELF/NCC/NSS/Departments etc.       | Department  |
| Nature of activity<br>(seminar/Workshop/Extn.<br>Lecture etc. | Field Visit   |
| Title of the Activity   | Research Center Visit   |
| Name of the<br>Department/Committee                           | Department of Botany  |
| Details of Resource Persons (Name, Designation etc., )        | Sujay Biotech Pvt Ltd Vijayawada Tissue culture Unit Scientists                                 |
| No of students participated                                   | 30  |
| Name of the Lecturers who planned & conducted the activity    | Planned and Organized by Mrs D.Jyothi Lecturer In Charge Ms V. Nagalakshmi , Lecturer in Botany |
| Remarks   | Research Center visit was very beneficial to students   |

Department of Botany SRR & CVR Govt DegreeCollege organized a one day visit / trip to Research station on 9.1.2018.

#### **Motive of this program:**

- On site /Hands on exposure to students
- Incorporating Research zeal in students
- Exposing students to to practical real time Research working environment

### **Tour Report:**

Students and faculty visited Sujay Biotech Pvt Ltd, Vijayawada Tissue culture labs.

Students observed all the processes happening in the tissue culture unit. The scientists working in the tissue culture unit showed students all the equipment used in culturing of tissue

This Company staff showed students that they primarily produce Biofertilizers, biopesticides and biofungicides. They explained to students that the products offered by the industry are acknowledged for their features like precise pH value, accurate composition, longer shelf life, effective results and eco-friendliness.

'Sujay' group of Industries managing staff explained to students that they have a strong team of Scientists having experience to convert In-vitro technologies into applicative commercial technologies. The sectors include, Biotechnology, Agriculture, Waste management, Bio-energy, Aquaculture, Veterinary and Nutraceuticals.

The Staff explained that success of our products and consultancies lies in the school of thought of our R&D Scientists. They told that hard work of R&D wing led to clear understanding on the basic problems in elimination of malnutrition, detoxification of pollutants at-source and extraction of valuable end products from economic indigenous raw materials.

# Visit to Research Centre - Bujay Biotech. 09.01.2018 PYt. Ltd. - VIJAYAWADA.





Final Year BZC students and faculty have visited

the tissue culture Unit - Scientists have explained about Instrumentation, Hydroponics, tissue culture and culturing of animal feed.

Scientists explained to students the working mechanism of research lab equipment and their applications. They explained about the processes of Hydroponics, tissue culture, and culturing of animal feed.



Hydroponics is a type of horticulture and a subset of hydroculture which involves growing plants, usually crops, without soil, by using mineral nutrient solutions in an aqueous solvent. Terrestrial or aquatic plants may grow with their roots exposed to the nutritious liquid, or, in addition, the roots may be physically supported by an inert medium such as perlite, gravel, or other substrates. Despite inert media, roots can cause changes of the rhizosphere pH and root exudates can affect rhizosphere biology and physiological balance of the nutrient solution by secondary metabolites.

Plant tissue culture is a collection of techniques used to maintain or grow plant cells, tissues or organs under sterile conditions on a nutrient culture medium of known composition. It is widely used to produce clones of a plant in a method known as micropropagation.

Plant tissue culture includes two major methods: • (A) Type of in vitro growth-callus and suspension cultures. • (B) Type of explant—single cell culture, shoot and root cultures, somatic embryo culture, meristem culture, anther culture and haploid production, protoplast culture and somatic hybridisation, embryo culture, ovule culture, ovary culture, etc.



Students learnt about all the methods and process by directly seeing the cultures, observed the preparation of Media and its composition and observed the aseptic conditions maintained in tissue culture units.



Students observed Various sterilization methods . The tour was very informative and beneficial to Botany students .

#### **SRR & CVR Government Degree College**

9 9001: 2015 Certified Institution:: Ranked by NIRF in 101-150 band at NIRI-2020 8 in NIRF 2019 NAAC accredited Institution with grade B+ with C.G.P.A 2.6 during M Machavaram, Vijayawada, Krishna District, AP-520 004





| STUDENT SIGNATURES AND FEEDBACK |        |           |                 |              |              |  |
|---------------------------------|--------|-----------|-----------------|--------------|--------------|--|
| S.No                            | Date   | Class     | Roll no/ Reg no | Signature    | Remarks      |  |
| 991-1                           | 9.1.18 | · ÎI BZC  | 163174018       | Priganka     | Satisfactory |  |
| 2                               | 9.1.18 | 11 B) C   | 1631740 24      | ROJU         | 900d         |  |
| 3                               | 9.1.18 | IB 0.71   | 163174070       | Naga Fyeth:  | witer        |  |
| 4                               | 9.1.18 | JI. B 20  | 163174026       | DURGOLPYCIFO | 6α) d,       |  |
| 5                               | 9-1-18 | II.B. 20. | 1631740 22      | prosult      | Good.        |  |
| 6                               | 9-1-18 | 1137.C    | 16317-4020      | Pojiya       | G00 d        |  |
| 7                               | 9118   | II B. 7.C | 163174041       | Durie        | 67002        |  |
| 8                               | 9.1.18 | 11732C    | 163174025       | Machus       | vlefull      |  |
| 9                               | 9.1.19 | B Q 7 C   | 163174027       | Deepo        | Goarl        |  |
| 10                              | 9.1.18 | 11 BZC    | 163174019       | Salkem       | Good.        |  |
| 11                              | 9-148  | IB20      | 1631746 23      | prasonna     | - Good.      |  |
| 12                              | 9.1.18 | Il Bac    | 163174028       | Bhanaputo    | useryl       |  |
| 13                              | 9.1.18 | TRIC      | 163174040       | Sander       | 6700 d       |  |
| 14                              | 9,1,1  | TIBLE     | 163174046       | swathi       | Good         |  |
| 15                              | 9-1.14 | II Bre    | 163174043       | Rechal       | yeful.       |  |
| 16                              | 9.1.18 | 3 110.30  | 163174019       | Romesh       | useful       |  |





|       | STUDENT SIGNATURES AND FEEDBACK |           |                 |                       |                |  |  |
|-------|---------------------------------|-----------|-----------------|-----------------------|----------------|--|--|
| S.No  | Date                            | Class     | Roll no/ Reg no | Signature             | Remarks        |  |  |
| 1.    |                                 | I BEC     | 21317207        | k. Morel              | Useful         |  |  |
| 2.    |                                 | I BEC     | 21317201        | A. Pooganti           | Good           |  |  |
| 3.    |                                 | II B¥C    | 81317809        | T. Lavanya.           | Got awazeness. |  |  |
| ų.    |                                 | I BAL     | 21317205        | 11. Jagadeesh         | Good.          |  |  |
| 57    |                                 | TB世C      | 21317206        | T. Moudula            | useful.        |  |  |
| Ь.    |                                 | IBAC      | 21317212        | p. hote               | Corond         |  |  |
| 7.    |                                 | IBEC      | 21317204        | Deni Noga ch'         | got accouness  |  |  |
| 8.    |                                 | 11.13.2.0 | 20311205        | N. Mounilca           | Woled.         |  |  |
| 9.    |                                 | 11 B-2C   | 203(1203        | Shaik Baji<br>Baharan | Good           |  |  |
| 10.   |                                 | 111 B2C   | 20311003        | G. 7                  | Good           |  |  |
| 11.   |                                 | R1 820    | 90311216        | P. Sa'.               | weeful.        |  |  |
| 12    |                                 | III BZC   | 20311008        | P. Res                | 6700           |  |  |
| 12.   |                                 | T. R.     | 202/1277        | 料                     | Gwa.           |  |  |
| 14    | - 1                             | IJI RZC   | 20311213        | M. Gayatha            | a Good.        |  |  |
|       |                                 |           |                 |                       |                |  |  |
| Tapas |                                 |           |                 |                       |                |  |  |

